DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010879 Address: 333 Burma Road **Date Inspected:** 29-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Gu Peng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** TOWER / OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

HEAVY DOCK

This QA Inspector randomly observed the following work in progress.

SOUTH TOWER LIFT #1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201825 performing Flux Cored Arc Welding process for weld SSD1-SA15D/F-02 located on PCMK the weld between P287 and P171 on skin A of South tower lift 1. ZPMC QC Mr. Guo Peng monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053116 performing Flux Cored Arc Welding process for weld SSD1-SA16F/G-10 located on PCMK the weld between P503 and P169 on skin E of South tower lift 1. ZPMC QC Mr. Guo Peng monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054069 performing Flux Cored Arc

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Welding process for weld SSD1-SA16F/G-13 located on PCMK the weld between P503 and P1144 on skin E of South tower lift 1. ZPMC QC Mr. Guo Peng monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Cored Arc Welding process for weld SSD1-SA40B/E-08 located on PCMK the weld between P353 and P174 on skin D of South tower lift 1. ZPMC QC Mr. Guo Peng monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

WEST TOWER LIFT # 1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040759 performing Flux Cored Arc Welding process for weld WSD1-SA294F/G-22 located on PCMK the weld between P389 and P1144 on skin C of West tower lift 1. ZPMC QC Mr. He Gen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040736 performing Flux Cored Arc Welding process for weld WSD1-SA294F/G-20 located on PCMK the weld between P389 and P1144 on skin C of West tower lift 1. ZPMC QC Mr. He Gen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 049541 performing Flux Cored Arc Welding process for weld WSD1-SA294F/G-12 located on PCMK the weld between P393 and P1144 on skin C of West tower lift 1. ZPMC QC Mr. He Gen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 062126 performing Flux Cored Arc Welding process for weld WSD1-SA294F/G-14 located on PCMK the weld between P393 and P1144 on skin C of West tower lift 1. ZPMC QC Mr. He Gen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

OBSERVATION

TRIAL ASSEMBLY YARD

OBG SEGMENT 6 CW

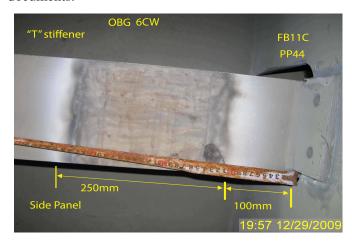
During the random visual inspection of OBG segment 6 CW this Quality Assurance (QA) Inspector observed ZPMC personnel performing heat straitening on the side panel (counter weight side) T stiffeners. Heat straightening performed approximately 100mm away from floor beam FB11C located at PP44. Thirteen numbers of "T" stiffener plates were heat straightened for a width of approximately 250mm on the top flange and various on the webs. ZPMC QC or CWI was not present during the time of heat straightening. Incident report was generated.

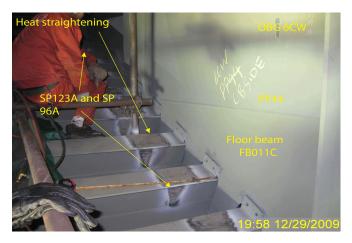
For further information, please see the attached pictures below.

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Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer